

## IN THE CLAIMS

1. (Currently Amended) A liquid crystal display comprising:

a liquid crystal panel including a plurality of the data lines extending in a column direction, a plurality of the gate lines in a row direction, and a plurality of first to third color pixels displaying image based on signals received from the data lines and the gate lines and arranged in a matrix;

a data driver applying data voltages required for image display to the data lines; and

a signal controller receives a plurality of first to third color image data for the first to third color pixels, supplying the received image data to the data driver, and generates control signals required for driving the liquid crystal panel,

wherein the signal controller changes an inversion type when ~~the number of a block pattern is larger than a predetermined value, the block pattern is formed by first and second dot blocks located in adjacent row and the same columns, the first and second dot blocks are formed by a gray difference between a pair of adjacent odd and even pixels in each block repeated in a predetermined pattern, each dot block includes at least two a~~ predetermined number of successive pairs of adjacent two pixels in a row included in at least one color pixel pixels among the first to third color pixels, and a magnitude of gray difference in gray between two pixels in each pair is equal to or larger than a critical value in each dot block.

wherein the predetermined pattern includes a first dot block in a first row and a second dot block located in the same columns as the first dot block in a second row adjacent to the first row,

wherein the first dot block has the gray differences of a first sign, and the second dot block has the gray differences of a second sign being opposite to the first sign,

wherein the signal controller determines whether each block is the first dot block or the second dot block,

wherein the signal controller comprises:

a block counter for counting ordinal of each block among the blocks in a row; and

a line counter for counting ordinal of a row including the blocks.

2. (Currently Amended) The liquid crystal display of claim 1, wherein the critical value has the first to third values for the first to third colors, and the first to third values are at least equal or different.

3. (Original) The liquid crystal display of claim 2, wherein the first to third colors are red, green and blue colors, respectively, and the second value is smaller than the first and third values.

4-5. (Cancelled).

6. (Currently Amended) The liquid crystal display of claim 1 ~~4 or 5~~, wherein the pixels in each row are grouped into a plurality of blocks, each block including even number of pixels, ~~and the signal controller determines whether each block is one of the block patterns.~~

7. (Cancelled).

8. (Currently Amended) The liquid crystal display of claim 1 ~~7~~, wherein the block counter counts the blocks by counting clock cycles after a data enable signal indicating sections for inputting the image data becomes a high level.

9. (Currently Amended) The liquid crystal display of claim 1 ~~7~~, wherein the block counter counts the blocks by counting clock cycles after a predetermined number of clocks from raise of a horizontal synchronization signal to be input to the signal controller to a high level.

10. (Currently Amended) The liquid crystal display of claim 1, wherein the line counter counts the rows based on timing of a data enable signal indicating sections for inputting the image data for a row or on timing of a horizontal synchronization signal.

11. (Currently Amended) A method of driving a liquid crystal display including a liquid crystal panel including a plurality of the data lines extending in a column direction, a plurality of the gate lines in a row direction, and a plurality of pixels arranged in a matrix, and a signal controller receiving a plurality of the RGB image data and generating control signals for driving the liquid crystal panel, the method comprising:

calculating ~~each magnitude of the gray~~ difference in gray between every two image data applied to a pair of adjacent odd and even pixels in each block including pixels in a row for each of first to third colors, ~~wherein each block includes at least two successive pairs of adjacent two pixels;~~

~~counting the number of the pair of adjacent odd and even pixels in each block that the magnitude of the gray difference is equal to or larger than a critical value;~~

determining that a block is first or second dot block depending on a sign of the gray difference ~~when the counted number is equal to a first predetermined number;~~

~~determining a block pattern formed by the first~~ a magnitude of the gray difference between the odd pixel ~~and second dot blocks located in adjacent row and the same columns; and~~

~~changing an inversion type of the liquid crystal display when the number of the block pattern~~ the even pixel in each pair in the block for at least one color is larger than a critical value, the first dot block having the gray differences of a first sign, and the second dot block having the gray differences of a second predetermined number sign being opposite to the first sign.

12. (Currently Amended) The method of claim 11, wherein the critical value has the first to third values for the first to third colors, and the first to third values are equal or at least different.

13. (Original) The method of claim 12, wherein the first to third colors are red, green and blue colors, respectively, and the second value is smaller than the first and third values.

14. (Cancelled).

15. (Currently Amended) The method of claim 12 14, wherein the rows including the blocks are counted based on timing of a data enable signal indicating sections for inputting the image data for a row or on timing of a horizontal synchronization signal.

16. (Currently Amended) The method of claim 12 14, wherein the blocks are counted by counting clock cycles after a horizontal synchronization signal to be input to the signal controller becomes in a high level.

17-20. (Cancelled).

21. (New) A liquid crystal display, comprising:

a liquid crystal panel including a plurality of the data lines extending in a column direction, a plurality of the gate lines in a row direction, and a plurality of first to third color pixels displaying image based on signals received from the data lines and the gate lines and arranged in a matrix;

a data driver applying data voltages required for image display to the data lines; and

a signal controller receiving a plurality of first to third color image data for the first to third color pixels, supplying the received image data to the data driver, and generating control signals required for driving the liquid crystal panel,

wherein the signal controller changes an inversion type when dot blocks are repeated in a predetermined pattern, each dot block includes a predetermined number of successive pairs of adjacent two pixels in a row included in at least one color pixels

among the first to third color pixels, and a magnitude of difference in gray between two pixels in each pair is larger than a critical value in each dot block,

wherein the predetermined pattern includes a first dot block in a first row and a second dot block located in the same columns as the first dot block in a second row adjacent to the first row,

wherein the first and second blocks have the gray differences of a first sign or the first and second blocks have the gray differences of a second sign being opposite to the first sign,

wherein the signal controller determines whether each block is the first dot block or the second dot block, and

wherein the signal controller comprises:

a block counter for counting ordinal of each block among the blocks in a row; and

a line counter for counting ordinal of a row including the blocks.

22. (New) A method of driving a liquid crystal display including a liquid crystal panel including a plurality of the data lines extending in a column direction, a plurality of the gate lines in a row direction, and a plurality of pixels arranged in a matrix, and a signal controller receiving a plurality of the RGB image data and generating control signals for driving the liquid crystal panel, the method comprising:

calculating difference in gray between every two image data applied to a pair of adjacent odd and even pixels in each block including pixels in a row for each of first to third colors;

determining that a block is first or second dot block depending on a sign of the gray difference when a magnitude of the gray difference between the odd pixel and the even pixel in each pair in the block for at least one color is larger than a critical value, the first dot block having the gray differences of a first sign, and the second dot block having the gray differences of a second sign being opposite to the first sign;

determining whether a previous block in a previous row and the same column is the first or second dot block when a current block in a current row and the same column

is the first or second dot block, wherein the current block is determined to be a double-dot block when both the current block and the previous block are the first dot blocks or the second dot blocks; and

changing an inversion type of the liquid crystal display when the number of the double-dot blocks is larger than a predetermined value.

23. (New) A method of driving a liquid crystal display including a liquid crystal panel including a plurality of the data lines extending in a column direction, a plurality of the gate lines in a row direction, and a plurality of pixels arranged in a matrix, and a signal controller receiving a plurality of the RGB image data and generating control signals for driving the liquid crystal panel, the method comprising:

calculating difference in gray between every two image data applied to a pair of adjacent odd and even pixels in each block including pixels in a row for each of first to third colors;

determining that a block is first or second dot block depending on a sign of the gray difference when a magnitude of the gray difference between the odd pixel and the even pixel in each pair in the block for at least one color is larger than a critical value, the first dot block having the gray differences of a first sign, and the second dot block having the gray differences of a second sign being opposite to the first sign;

determining whether a previous block in a previous row and the same column is the first or second dot block when a current block in a current row and the same column is the first or second dot block, wherein the current block is determined to be a first double-dot block when both the current block and the previous block are the first dot blocks, or the current block is determined to be a second double-dot block when both the current block and the previous block are the second dot blocks; and

changing an inversion type of the liquid crystal display when the number of the first dot blocks is larger than a first critical value and the number of the first double-dot blocks is larger than a predetermined number of the first dot blocks, or the number of the second dot blocks is larger than a second critical value and the number of the second double-dot blocks is larger than a predetermined number of the second dot blocks.